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10/748,280	12/31/2003	Koichiro Kishima	SON-2006/CON	6607

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/748,280

Applicant(s)

KISHIMA ET AL.

Examiner

Aristotelis M. Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION**

Applicant's response of 10/17/05 has been considered with the following results.

***Claim Objections***

Claims 19 and 34 are objected to. As recited, claim 19 depends upon claim 9. The limitations of claim 19 are already found in claims 9 and 24 respectively. This raises the question whether such subject matter is attempting to define a "second" recording layer? Further elaboration is respectfully considered.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 2,4,8,16,17, 24,25,28, 31 and 34 are rejected under the judicially created doctrine of double patenting over claims 1-4 of U. S. Patent No. 6,934,224 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent. Similar analysis with respect to duplicate claims 40,43-45,51.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

The following analysis is made:

Claim 2:

6934224/Claim 1

An information recording disc including:  
a signal recording layer for use in  
an information recording/reproducing

Claim 1, line 1  
claim 2 lines 2-6

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apparatus having a light source for  
emitting a light flux and a focusing element for  
focusing the light flux to be applied to the signal  
recording layer: and

a first dielectric layer between said signal  
recording layer and said focusing element,

claim 1, lines 10-12

wherein the distance between the focusing element  
and a surface portion facing to the focusing  
element is not greater than a wavelength of the light  
flux,

inherent with near field  
systems – line 1 of patent claim

wherein the surface portion facing to the focusing  
element is coated with an anti-reflection coating film,

claim 3

wherein a first dielectric film is on the signal recording layer, and  
the anti-reflection coating layer is on the first dielectric film, so as to  
prevent reflection of the light flux incident into the first dielectric film.

claim 1 lines 8-9

& claim 3

#### Claim 24

Claim 1

An information recording disc comprising:

claim 1, lines 1-5

a signal recording layer, a focusing element  
focusing a light flux onto said signal recording layer;

a first dielectric layer, said first dielectric layer  
being between said signal recording layer and  
said focusing element;

claim 1 lines 10-11

a substrate;

claim 1 line 6

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a reflection film, said reflection film being between claim 1, line 7  
said signal recording layer and said substrate;

a second dielectric layer, said second dielectric layer being claim 1, lines 8-9  
between said signal recording layer and said reflection film;

an anti-reflection coating film, said anti-reflection coating film reducing claim 3  
reflection of said light flux incident into said first dielectric layer,

said anti-reflection coating film including; claim 1, lines 12 plus  
a third dielectric film between said signal recording layer  
and said focusing element;

a fourth dielectric film between said third claim 2,  
dielectric film and said focusing element;

a fifth dielectric film between said fourth dielectric film claim 2  
and said focusing element.

With respect to claim 4, this is already present in patent claim 4.

With respect to claim 8, such is present, i.e. the disc is smooth and flat.

With respect to claim 16, already in patent claim 2, i.e., the examiner interprets  
The transparent heat-radiating layer as further defined by claims 1 and 2 as meeting such.

With respect to claim 17, already included in allowed claim 2.

With respect to claim 31, already present.

With respect to claim 34, already in allowed claim 3.

Furthermore, there is no apparent reason why applicant was prevented from  
presenting claims corresponding to those of the instant application during prosecution of the application,

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which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

2. Claims 2-4, 8, 24, 9-12, 14, 18, 19, 26, 30, 31 and 34 are rejected under the judicially created doctrine of double patenting over claims 1, 3, 6, 8, 9, 14, 21, 22 of U. S. Patent No. 6552968 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

Claim 2:

An information recording disc including:  
a signal recording layer for use in  
an information recording/reproducing  
apparatus having a light source for  
emitting a light flux and a focusing element for  
focusing the light flux to be applied to the signal  
recording layer: and

Claim 1 of 6552968

disc claimed/for use limitations no  
distinction

a first dielectric layer between said signal  
recording layer and said focusing element,

first protective layer - see  
claim 3.

wherein the distance between the focusing element  
and a surface portion facing to the focusing  
element is not greater than a wavelength of the light  
flux,

inherent in near field systems

wherein the surface portion facing to the focusing

claim 1 lines 6-11

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element is coated with an anti-reflection coating film,

wherein a first dielectric film is on the signal recording layer, and the anti-reflection coating layer is on the first dielectric film, so as to prevent reflection of the light flux incident into the first dielectric film.

With respect to claim 3 – see allowed claims 3/6.

With respect to claim 4 – already in allowed claim 1.

With respect to claim 8, such is inherent, i.e., the disk is smooth and flat.

Claim 24

An information recording disc comprising:

a signal recording layer, a focusing element

focusing a light flux onto said signal recording layer;

a first dielectric layer, said first dielectric layer

being between said signal recording layer and

said focusing element;

a substrate;

a reflection film, said reflection film being between

said signal recording layer and said substrate;

a second dielectric layer, said second dielectric layer being

between said signal recording layer and said reflection film;

an anti-reflection coating film, said anti-reflection coating film reducing

reflection of said light flux incident into said first dielectric layer,

said anti-reflection coating film including;

Claim 8/1

claim 1, line 1

for use, no distinction

claim 1 line 3

claim 8, lines 1-3

claim 9, lines 1-3

claim 1, lines 6-11

claim 6, lines 1-3.

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a third dielectric film between said signal recording layer  
and said focusing element;

With respect to claim 34, such is already present in the above claims.

Claim 9

An information recording/reproducing  
apparatus comprising:

a rotation mechanism for holding and  
rotating an information recording disc;

a substrate;

a reflection film,

said reflection film being between said signal  
recording layer and said substrate:

a second dielectric layer, said second

dielectric layer being between

said signal recording layer and said reflection film;

a light source; and

a focusing element for focusing a light flux  
emitted from the light source

so as to be applied to a signal recording layer  
of the information recording disc;

wherein the information recording disc is used in

Claim 14

claim 1

obvious/inherent

claim 14, lines 8-15

claim 21

claim 22

claim 14, lines 3-7

inherent



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such a manner that a distance between the focusing element and the surface portion facing to this focusing element is not greater than a wavelength of the light flux, and the information recording disc includes an anti-reflection coating film on the surface portion facing to the focusing element,

the information recording disc includes a first dielectric film on the signal recording layer, and the anti-reflection coating layer of the information recording disc is on the first dielectric film, so as to prevent reflection of the light flux incident into the first dielectric film. present.

With respect to claim 10, see allowed claim 19.

With respect to claim 11, already present in above claims.

With respect to claim 12, already present in the above claims.

With respect to claim 14, see claim 18.

With respect to claim 18, already present.

With respect to claim 19, already present in the above claims.

With respect to claim 26,30, and 31 these are present in the above claims

3. Claim 3 is rejected under the judicially created doctrine of double patenting over the claims as analyzed above in paragraph one, further considered with Maeda et al.

The use of a multilayered antireflection film in this environment is further taught by the Maeda et al reference, see the disclosure with respect to figures 12-15.

It would have been obvious to modify the base system as relied upon above in paragraph 1 with the additional multilayered antireflection film, motivation is as discussed therein.

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4. Claims 5-7,25,26,30, 35-38 are rejected under the judicially created doctrine of double patenting over the claims as analyzed above in paragraph one, further considered with the acknowledged prior art/Mori et al.

With respect to the limitations of claim 5, such is considered present in the acknowledge prior art, the 2<sup>nd</sup> dielectric film/ or Mori et al.

With respect to claims 6,7,25,26,30, 35 and 36 such is also considered present/taught by either the acknowledged prior art/Mori et al.

With respect to the limitations of claims 37-38, this is considered taught by the acknowledged prior art. Alternatively, sils are well known in this environment.

With respect to claim 25, the air gap limitation is considered present in the above combined teachings, i.e., an air gap is present in near field systems.

It would have been obvious to modify the base system as relied upon above in paragraph 1 and further with the acknowledged materials taught by either the prior art or Mori et al. Motivation is to use existing recognized materials in this environment and hence save valuable resources such as time in (re)testing materials for their acknowledged properties.

5. Claims 9-13,15,18-23 are rejected under the judicially created doctrine of double patenting over the claims of U. S. Patent No. 6,934,224 as analyzed above in paragraph 1 and further modified with Maeda et al. The analysis provided above in paragraph 1 is repeated herein.

Furthermore, claim 9 is drawn to an apparatus additionally having as recited in claim 9, line 3 a rotating mechanism, as well as in lines 10-11 a focusing element.

In the above noted patent although desiring such medium to be used in a near field system, does not specify such elements.

Maeda et al describe such elements – see col. 8 lines 38 plus as being necessary for recording/reproducing systems albeit for a non-near field system.

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It would have been obvious to modify the base system as relied upon in paragraph 1 with the teaching from Maeda et al motivation is to permit the overall record to be used in a recording/reproducing system.

With respect to claims 10,13 and 18, Maeda et al further defines a multilayered antireflection film – see description of figures 12-15 wherein such thicknesses are depicted.

It would have been obvious to modify the base system with the above additional teaching from Maeda et al, motivation is as described therein.

The limitations of claims 11 and 12, are met by the above combined systems – see the patented claims in the '224 document.

With respect to claim 15, such is inherently present in the patent – i.e., the disc surface is smooth and flat.

With respect to claims 19 and 20, the examiner interprets claim 19 as a duplicate of claim 18 and hence met as discussed above.

With respect to claims 21-23 the multilayered film composition is met by Maeda et al, see the discussion at col. 5 lines 37-44. Use of such compositions already known in the art is considered obvious, motivation is to save resources, i.e., re-testing of materials to see which ones are compatible in with the recording layers.

6. Claims 32,33 are rejected under the judicially created doctrine of double patenting over the claims as analyzed above in paragraph one, further considered with Official notice.

The recording materials defined in these claims is considered old and well-known and official notice is taken thereof.

It would have been obvious to modify the base system as stated above in paragraph 1 with the well known recording materials, motivation is to use existing materials for their properties.

7. Claims 13,16,17,25 and 27 are rejected under the judicially created doctrine of double patenting over the claims as analyzed above in paragraph two, further considered with Maeda et al.

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With respect to claims 13,16,17,25 and 27, Maeda et al discloses a multilayered antireflection film composition – note the materials, thickness etc. – see the description starting at col. 5 line 30.

It would have been obvious to modify the base system as relied upon above in paragraph two with the above additional teaching from Maeda et al, motivation is as discussed therein.

8. Claims 20, 21,22,23,28,29,35 and 36 are rejected under the judicially created doctrine of double patenting over the claims as analyzed above in paragraph two, further considered with Mori et al.

The materials defined are taught in the acknowledged prior art/Mori et al also teaches such materials in this environment.

It would have been obvious to modify the base system with the above teaching; motivation is to take advantage of the materials for their inherent properties.

9. Claims 32,33 are rejected under the judicially created doctrine of double patenting over the claims as analyzed above in paragraph two, further considered with Official notice.

The recording materials defined in these claims is considered old and well known and official notice is taken thereof. Duplicate claims 48 & 49 are included herewith.

It would have been obvious to modify the base system as stated above in paragraph 2 with the well known recording materials, motivation is to use existing materials for their properties.

10. Claims 6,7, and 13 are rejected under the judicially created doctrine of double patenting over the claims as analyzed above in paragraph two, further considered with itself.

With respect to these limitations as noted in the above patent ('968) the particular thickness of not less than 100 nm is found in claim 18, hence the limitations of claims 6 and 13 are considered obvious thereover, while claim 7 is considered met by the above claim.

11. Claims 8 & 15 are rejected under the judicially created doctrine of double patenting over the claims as analyzed above in paragraphs one and two respectively further considered with Official notice.

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With respect to these limitations, the method recited—that of burnishing is considered a well known manufacturing technique in this environment, and Official notice is taken thereof.

It would have been obvious to modify the base system as relied upon in paragraphs 1 and 2 and use a well known manufacturing step in order to manufacture/create the disc.

12. Claims 37 & 38 are rejected under the judicially created doctrine of double patenting over the claims as analyzed above in paragraph two, further considered with the acknowledge prior art description of near field systems which use sil elements.

It would have been obvious to modify the base system as stated in paragraph two above with the sil element(s), motivation is to use sil(s) for their intended uses in near field systems.

#### ***Response to Arguments***

Applicant's arguments filed 10/17/05 have been fully considered but:

a) with respect to the previously presented rejections relying upon US patent 6552968 they are not persuasive since no terminal disclaimer with this patent has been submitted.

b) with respect to the newly introduced rejections predicated upon US patent 6934224.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thursday 8 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos  
Primary Examiner  
Art Unit 2656



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